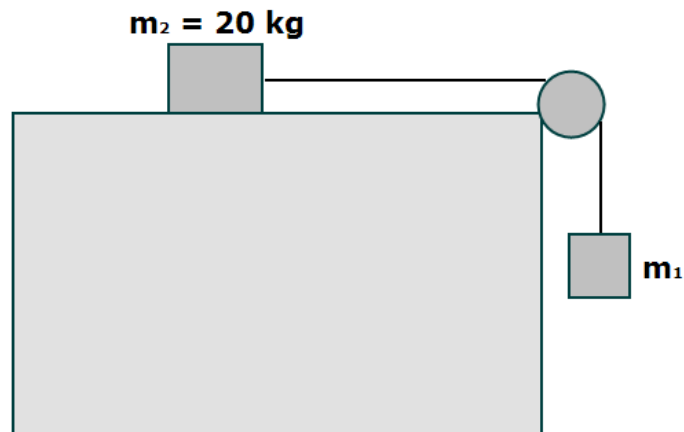
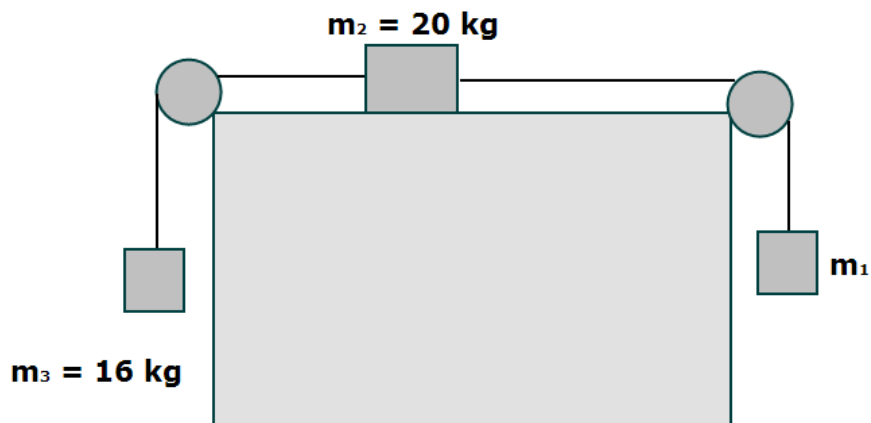
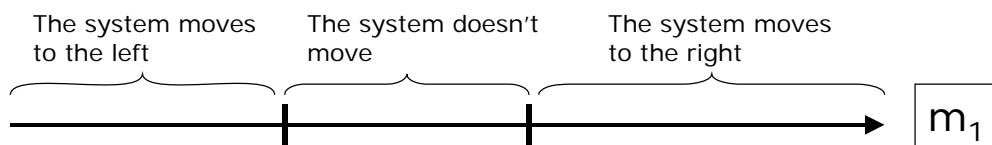


**Dynamics: Exercises**

- 1** This system of two bodies is moving at constant velocity.
- a) If the value of the friction coefficient is  $\mu=0.25$ , determine the mass  $m_1$  and the value of the tensions
  - b) If the mass is  $m_1 = 12$  kg, determine the friction coefficient and the value of the tensions

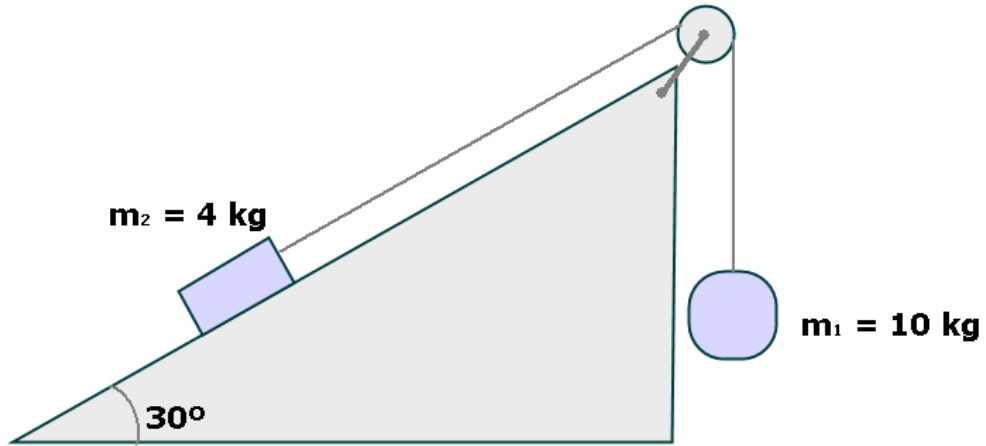


- 2** Study the motion of the system as a function of the value of  $m_1$ :

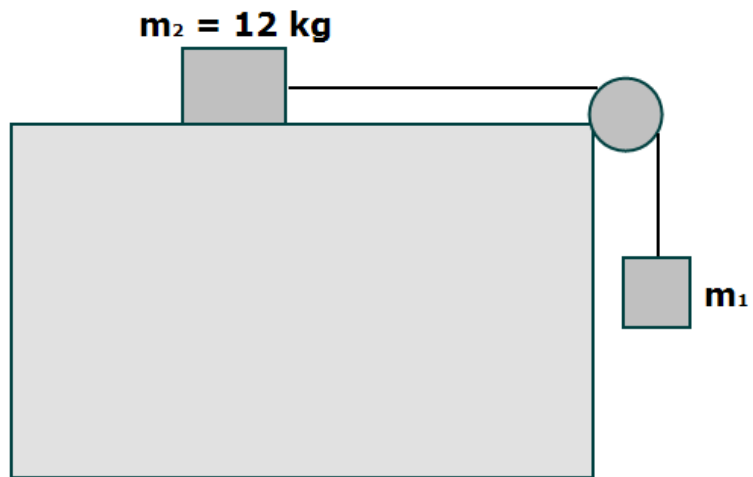


$\mu=0.2$

3 The acceleration of the system is  $a=1.2 \text{ m/s}^2$ . Determine the value of the friction coefficient.



4 The acceleration of the system is  $a=2 \text{ m/s}^2$ . Determine the value of  $m_1$ .



$\mu = 0.25$